

CLAIMS

What is claimed is:

1. A gray water recycling system comprising:
a lower tank for collecting gray water from at least one selected gray water source, said lower tank being placed at a lower altitude than said at least one selected gray water source;
an upper tank placed at a higher altitude than at least one water target connected to the system;
a pump to pump collected gray water in said lower tank to said upper tank; and
piping connecting said upper tank to said at least one water target.
2. The system of claim 1, further comprising at least one non-return valve to prevent said gray water in said upper tank from returning to said gray water in said lower tank.
3. The system of claim 1, further comprising a low pressure supply valve to connect piping from said upper tank to said at least one water target, such that water pressure in said piping and in said supply valve is substantially unchanged.
4. The system in claim 1, further comprising at least one dispenser for dispensing at least one additive into collected gray water.
5. The system in claim 1, further comprising at least one filtering mechanism selected from the group consisting of filters and traps.
6. The system of claim 5, wherein said filtering mechanism is to filter collected gray water at at least one location selected from the group consisting of: upon entering into said lower tank, upon being transferred from said lower tank to said upper tank, and upon being transferred from said upper tank to said water target.
7. The system in claim 1, further comprising at least one overflow outlet, for discharging and/or distributing excess gray water from said lower tank.

8. The system in claim 1, further comprising at least one overflow outlet for discharging and/or distributing excess gray water from said upper tank.
9. The system in claim 1, further comprising at least one drain valve for discharging excess content from said lower tank.
10. The system in claim 1, further comprising at least one drain valve for discharging excess content from said upper tank.
11. The system in claim 1, further comprising a water backup mechanism for ensuring constant flow of water into the system, said water backup mechanism including a fresh water inlet into said upper tank.
12. The system of claim 11, wherein said water backup mechanism further comprises a valve in said fresh water inlet for preventing contact between collected gray water and said fresh water inlet.
13. The system of claim 11, wherein said water backup mechanism further comprises a shut-off valve and float for determining when at least a minimum water level has been reached in said upper tank.
14. The system of claim 13, wherein said water backup mechanism is to initiate a fresh water flow into said upper tank when a selected water level has been reached in said upper tank.
15. The system of claim 14, wherein said water backup mechanism further closes off said fresh water flow when at least said minimum water level has been reached in said upper tank.
16. The system in claim 1, further comprising a shut-off valve to close off a flow of water from said upper tank to said at least one water target.
17. The system of claim 1, wherein said at least one water target is at least one target selected from the group consisting of flush tanks, gardens, fields, drainage systems, cleaning apparatus, and black water apparatus.
18. A method for recycling gray water comprising:

collecting gray water from at least one selected source in a lower tank, said lower tank being situated at an altitude lower than said at least one selected source;

transferring gray water collected in said lower tank to at least one upper tank connected to said lower tank, said upper tank connected to at least one water target, said upper tank being situated at an altitude higher than said at least one water target; and

when said water target requires a water supply, releasing gray water from said upper tank to said at least one water target.

19. The method of claim 18, further comprising dispensing at least one additive to said collected gray water.
20. The method of claim 18, further comprising discharging water from said lower tank.
21. The method of claim 18, further comprising discharging excess water from said upper tank.
22. The method of claim 18, comprising providing a filtering mechanism to filter said gray water.
23. The method of claim 22, wherein said filtering mechanism is selected from the group consisting of a filter and a trap.
24. The method of claim 18, comprising filtering out undesired elements from water collected in said lower tank, before said water is transferred into said upper tank.
25. The method of claim 18, comprising filtering out undesired elements from water in said upper tank before said water flows into said water target.
26. The method of claim 18, further comprising providing at least one additional water inlet to add fresh water to said upper tank.
27. The method of claim 26, further comprising placing a valve in said additional water inlet, to prevent contact of collected gray water in said upper tank with a fresh water source.

28. The method of claim 18, wherein said at least one water target is connected to said upper tank using piping and at least one low pressure supply valve.
29. The method of claim 28, wherein a shut-off valve is connected to said piping, to shut off said upper tank from said at least one water target.
30. A low pressure plumbing system comprising:
 - an inlet pipe to transfer water from a gray water collection tank into a flush tank;
 - a low pressure valve, with substantially similar internal thickness as said inlet pipe, said valve being connected between said inlet pipe and said flush tank; and
 - at least one connector, with substantially similar internal thickness as said low pressure valve, to connect said low pressure valve to a filler tube in said flush tank.
31. A method for recycling gray water, comprising:
 - collecting gray water from at least one selected gray water source in a lower tank, said lower tank being situated at an altitude lower than at least one gray water source;
 - pumping collected gray water from said lower tank to an upper tank, said upper tank being situated at an altitude higher than at least one water target; and
 - when said at least one water target requires a water supply, releasing gray water from said upper tank to said at least one water target.
32. The method of claim 31, further comprising adding fresh water to said upper tank from a fresh water inlet, when gray water level in said upper tank is below a determined level.
33. The method of claim 31, wherein said at least one water source is at least one source selected from the group consisting of washing machines, basins, sinks, showers, bath tubs and air conditioning units.

34. The method of claim 31, wherein said at least one water target is at least one target selected from the group consisting of flush tanks, gardens, fields, drainage systems, cleaning apparatus, and black water apparatus.